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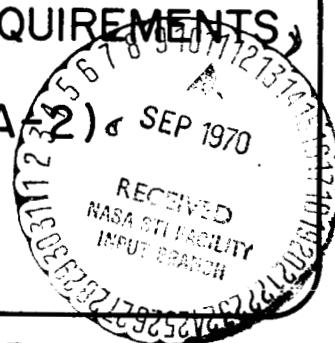
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NASA PROGRAM APOLLO WORKING PAPER 1155

APOLLO LEM MEASUREMENTS REQUIREMENTS

LEM TEST ARTICLE 2 (LTA-2)



FACILITY FORM 602

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ACCESSION NUMBER
(PAGES)
TMX 65057
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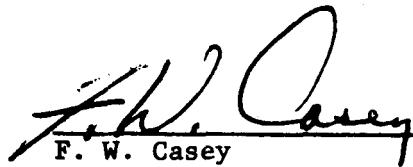
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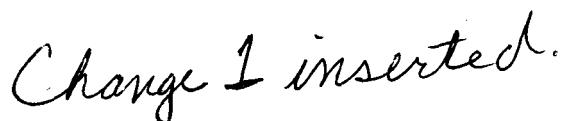
JAN 14, 1965

CHANGE SHEET**FOR****NASA PROGRAM APOLLO WORKING PAPER 1155****APOLLO LEM MEASUREMENT REQUIREMENTS****LEM TEST ARTICLE 2 (LTA-2)****Change 1 to January 14, 1965****April 1, 1965**
F. W. Casey**Page 1 of 3 Pages**

After the attached enclosures, which are replacement or additional new pages, have been inserted and after the following pen and ink changes have been made, insert this change sheet between the cover and title page and write on the cover, "Change 1 inserted".

Note: A black bar in the margin of the change page indicates the area of change.

1. Remove page 2-2 and insert replacement page.
2. Insert page 2-3 as an additional page.



NASA PROGRAM APOLLO WORKING PAPER 1155
APOLLO LEM MEASUREMENTS REQUIREMENTS
LEM TEST ARTICLE 2 (LTA-2)

APPROVED BY:

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JAN 14, 1965

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1.0 Introduction

This report is a compilation of present instrumentation measurement requirements for LEM Test Article-1, (LTA-2). It reflects the official parameters as approved by the Instrumentation Requirements Group (IRG) at MSC-ASPO, Houston and shall be revised periodically to ensure the availability of current information.

Twenty-five accelerometer measurements are included in this report.

LTA-2 Measurements List

<u>No.</u>	<u>Instrument</u>	<u>Type</u>	<u>Minimum Freq. Response</u>	<u>Location</u>	<u>Orientation</u>
1.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Ascent Stage Loc. #2	Launch Vehicle axes at Point (x268, y0.0, -z54)
2A.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Descent Stage Loc. #5	Launch Vehicle axes at Point (x199, -y27, +z27)
2B.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Bottom of LEM Descent Stage Loc. #13	Launch vehicle axes at point (x131, -y24, +z24)
3A.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Fuel Tank (-Y) Loc. #17	Launch Vehicle axes at point (x202, -y53, -z1.0)
3B.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Oxidizer Tank (+Z) Loc. #18	Launch Vehicle axes at point (x202, -1.0, +z55)
3C.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Fuel Tank (+Y) Loc. #19	Launch Vehicle axes at point (x202, +y55, +z1.0)
3D.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	Top of LEM Oxidizer Tank (-Z) Loc. #20	Launch Vehicle axes at point (x202, +y1.0, -z53)
4.	Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	SILA/LEM Attach Frames (Saturn 1B ST1872)	Radial , Tangential Longitudinal 0=0

Changed April 1, 1965

<u>No. Instrument</u>	<u>Type</u>	<u>Minimum Freq. Response</u>	<u>Location</u>	<u>Orientation</u>
5. Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	SLA/LEM Attach Frames (Saturn 1B ST1872)	0 = 90°
6. Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	SLA/LEM Attach Frames (Saturn 1B ST1872)	0 = 180°
7. Linear Accelerometer (Triaxial)	Viscous Damped	0-20 CPS	SLA/LEM Attach Frames (Saturn 1B ST1872)	0 = 270°

Total of 33 Measurements Requested